35

13

of computer-readable media therefore include for example: a floppy disk, a flexible disk, hard disk, magnetic tape, any other magnetic medium, a CD-ROM, DVD, any other optical medium, punch cards paper tape, any other physical medium with patterns of holes, a RAM, a PROM and EPROM, a FLASH-EPROM, any other memory chip or cartridge, or any other medium from which a computer can read programming code and/or data. Many of these forms of computer readable media may be involved in carrying one or more sequences of one or more instructions to a processor for execution.

It should be noted that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art. Such changes and modifications may be made without departing from the spirit and scope of the present invention and without diminishing its attendant advantages.

We claim:

- 1. A system for serial comparison of physiological data, comprising:
 - a controller;
 - a user interface; and
 - a memory including instructions that, when executed by the controller, perform the steps of:
 - receiving from a first data source a current clinical report including a first set of physiological data of a patient and computer-generated first interpretive statements;
 - accessing, from a patient file in a patient database, a previous clinical report including a second set of physiological data of the patient and physician-edited interpretive statements;
 - mapping the physician-edited interpretive statements into one or more codes of a structured data format and updating the previous clinical report with the one or more codes, wherein each code uniquely identifies a medical state;
 - performing a serial comparison between the current clinical report and the updated previous clinical report and generating serial comparison interpretive statements from the serial comparison;
 - providing to a user, via the user interface, the serial $_{40}$ comparison interpretive statements; and
 - receiving, via the user interface, current physician-edited interpretive statements.
- 2. The system of claim 1, wherein the system further includes a mapping dictionary database including a lookup 45 table of interpretive statements, wherein each interpretive statement maps to at least one of the codes of the structured data format.
- 3. The system of claim 2, wherein the system further includes a network interface, and wherein the memory further includes instructions that, when executed by the controller, perform the step of:

14

- receiving, from a remote server via the network interface, an update to the mapping dictionary database.
- **4**. The system of claim **1**, wherein the system further includes a network interface, and wherein the memory further includes instructions that, when executed by the controller, perform the step of:
 - storing the current physician-edited interpretive statements as a part of the current clinical report in the patient file in the patient database.
- **5**. The system of claim **1**, wherein the system further includes a network interface, and wherein the memory further includes instructions that, when executed by the controller, perform the steps of:
 - detecting an unknown interpretative statement in the physician-edited interpretive statements; and
 - transmitting the unknown interpretative statement to a remote server.
- 6. The system of claim 1, wherein the physiological data is 20 electrocardiographic data.
 - 7. The system of claim 1, wherein the step of mapping the physician-edited interpretive statements into the one or more codes of the structured data format and updating the previous clinical report with the one or more codes, includes the substeps of:
 - parsing the physician-edited interpretive statements into two or more sub strings; and
 - classifying at least one substring to correspond to at least one code of a structured data format.
 - **8**. The system of claim **1**, wherein the memory further includes instructions that, when executed by the controller, perform the step of:
 - when one of the one or more codes of a structured data format meets a criteria for issuing a critical alert, providing to a user, via the user interface, a prompt to issue a critical alert.
 - 9. The system of claim 8, wherein the criteria for issuing a critical alert is a code indicating one of acute myocardial infarction; tachycardia of greater than one hundred sixty beats per minute, a Mobitz II heart block; pacemaker failure; ventricular tachycardia; bradycardia of less than 40 beats per minute; and a new onset of a left bundle branch block.
 - 10. The system of claim 8, wherein the memory further includes instructions that, when executed by the controller, perform the step of:
 - receiving, via the user interface, a user input in response to the prompt to issue a critical alert;
 - when the user input indicates that a critical alert is to be issued, logging the critical alert in the patient file in the patient database.

* * * * *